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EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT

PAPER NUMBER

1624

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/808,210

Applicant(s)

TIMMER ET AL.

Examiner

Venkataraman Balasubramanian

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,14-19,21,30-32,34,43-45,47,56-58,60,69-71,73,82 and 83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/28/04, 6/30/05, 8/
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Group I, claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83, along with election of a species of claim 82 in the reply filed on 1/17/2006 is acknowledged.

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 will be examined to the extent they embrace the elected subject matter.

Claims 4, 6-13, 20, 22-29, 33, 35-42, 46, 48-55, 59, 61-68, 72, 74-81 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected subject matter.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Information Disclosure Statement***

References cited in the Information Disclosure Statements, filed on 6/28/2004, 6/30/2005 and 8/22/2005, are made of record.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriarty et al. WO 01/47897.

Moriarty et al., discloses several trisubstituted triazines as inhibitors of TNF-I. See formula shown on page 3 and note the definition of various variable groups. Also see pages 64-74 for general synthesis. Particularly note the definition of  $Y-R^6$ ,  $Z$  and  $R^{11}$  overlap with instant  $Zx$ ,  $R^{7a}$  and  $R^{2a}$ . Thus the compounds taught by Moriarty generically include instant compounds. See Table 1-4 shown on pages 75-102 for examples of triazine compounds made.

Instant claims require variously substituted triazine ring wherein the phenyl ring is substituted with specific groups wherein substituents included in the aryl ring is not  $CONH_2$  as taught in Moriarty et al.

However, Moriarty et al., teaches the equivalency of exemplified compounds in Table 1-4 and general syntheses on pages 64-102 with those claimed with various substituents in the definitions of various variable groups on page 3. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in phenyl ring and the and the second amino group as permitted by the reference and expect resulting compounds to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamikubo et al. US 6,123,763.

Kamikubo et al. teaches several trisubstituted triazines as pigment dispersing agents, which include instant compounds claimed generically. See column 2, formula I and note the definition of  $Y_1$ ,  $Y_2$ ,  $X_1$ ,  $R_1$  and  $R_2$ . Note with definition the triazine taught by

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Kamikubo et al. include compounds generically claimed in the instant claims. See column 4-17 and Table I (21-25) for various compounds made.

Kamikubo et al. differs in not exemplifying all the compound of the genus embraced in the compound of formula I with various  $Y_1$ ,  $Y_2$ ,  $X_1$ ,  $R_1$  and  $R_2$  choices.

However, Kamikubo et al., teaches the equivalency of exemplified compounds in column 4-17 and Table I and with those claimed with various substituents in the definitions of various variable groups on column 2.

Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in phenyl ring and the and as well as other tow substituents on the triazine ring as permitted by the reference and expect resulting compounds to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daeyaert et al. US 6,150,360.

Daeyaert et al. teaches several trisubstituted triazines, which include compounds of claimed in the instant claims, for the treatment of HIV infection. See formula I on col. 1, lines 30-40 and note the definition of L, A,  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  and n. Note with these definitions, compounds taught by Daeyaert et al. corresponds to instant triazine with  $Z_x$ ,  $R^{7a}$  and  $R^{2a}$  groups. See col. 2 through 9 for preferred embodiments and examples of the compounds on col. 9-10, process of making and compounds made on col. 10

through col. 22. See col. 23 to 27 for compounds made, especially see Table 1 and Table 2.

Daeyaert et al. differs from the instant claims in not exemplifying all compounds generically taught and claimed.

However Daeyaert et al. teaches the equivalency exemplified examples of trisubstituted core, examples shown on col. 9 and Table 1 and Table 2 with those claimed therein in the definition of various variable groups of formula I on col. 1. See definition of L, A, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> and n shown on col. 1-2 and preferred embodiments of these groups on col. 2-9.

Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted the triazine ring as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson et al. WO 01/47921.

Erickson et al. teaches several trisubstituted triazines, which include compounds of claimed in the instant claims, for the treatment of diabetes, asthma etc. See page 4, formula I, and note the definition of X, X<sup>1</sup>, X<sup>2</sup>, Y, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup>. Note with these definitions, compounds taught by Erickson et al. corresponds to instant triazine with Zx, R<sup>7a</sup> and R<sup>2a</sup> groups. See pages 4 through 11 for preferred embodiments and pages 23-35 for process of making. See pages 36-54, Table 1 for compounds made.

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Erickson et al. differs from the instant claims in not exemplifying all compounds generically taught and claimed.

However Erickson et al. teaches the equivalency exemplified examples of trisubstituted triazine core seen in Table 1 with those claimed therein in the definition of various variable groups of formula I. See definition of X, X<sup>1</sup>, X<sup>2</sup>, Y, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup>. and preferred embodiments of these groups in pages 4-11.

Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted the triazine ring as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armistead et al. WO 01/25220.

Armistead et al. teaches several disubstituted triazine compounds, which include those claimed in the instant claims, for the use as kinase inhibitors useful for treating angiogenesis and other related diseases. See formula shown on page 4 and note the definition of R<sup>1</sup> and R<sup>2</sup>. Note when R<sup>1</sup> or R<sup>2</sup> is NHR<sup>3</sup>, NHR<sup>5</sup>, NHR<sup>6</sup>, NR<sup>5</sup>R<sup>5</sup>, NR<sup>5</sup>R<sup>6</sup> and the other NHR<sup>5</sup>, NHR<sup>6</sup>, NR<sup>5</sup>R<sup>5</sup>, NR<sup>5</sup>R<sup>6</sup>, the compounds taught by Armistead et al. includes instant compounds when instant p1 =0 and R<sup>3a</sup> is H. See pages 5-28 for various preferred embodiments. Particularly, see Table I on pages 37-167 for over 1296 compounds made. Especially see page 96, compounds 580-581, and page 100



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compounds 619, 620. See also pages 29-35 for method of use and 183-288 for examples of compounds made.

As noted above, Armistead teaches over 1296 compound, but not exemplifying instant compounds.

However Armistead et al. teaches equivalency of exemplified compounds with those generically claimed. See formula shown on page 4 and page 4 through 28 especially for the definitions of  $R^1$ ,  $R^2$ . Especially note when  $R^1$  or  $R^2$  is  $NHR^3$ ,  $NHR^5$ ,  $NHR^6$ ,  $NR^5R^5$ ,  $NR^5R^6$  and the other  $NHR^5$ ,  $NHR^6$ ,  $NR^5R^5$ ,  $NR^5R^6$ , the compounds taught by Armistead et al. include instant compounds. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in triazine ring as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-8, 12-13, 16-17, 20-21, 24-25, 28-29, 32, 36-37, 39-41, 43 and 76-134 of copending Application No. 10/390, 485. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subgenus of compounds and composition claimed in the instant application are also embraced in the claims of the copending application 10/390,485. Note the trisubstituents in the triazine compounds claimed in copending application 10/390,485 overlap with the trisubstituents, Zx, R<sup>7a</sup> and R<sup>2a</sup> groups, of the triazine compounds of instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 and 7 of copending Application No. 10/397,968. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subgenus of compounds and composition claimed in the instant application are also embraced in the claims of the copending application 10/397,968. Note the groups Zx, R<sup>7a</sup> and R<sup>2a</sup> groups present in

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the triazine core of instant application overlap with G-Z, A-Y<sup>1</sup> and B-Y<sup>2</sup> groups present in the triazine core of the copending application..

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 and 7 of copending Application No. 10/400169. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subgenus of compounds and composition claimed in the instant application are also embraced in the claims of the copending application 10/400169. Note when n=0, the three substituents in the triazine core of copending application overlap with instant Zx, R<sup>7a</sup> and R<sup>2a</sup> groups.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-3, 5, 14-19, 21, 30-32, 34, 43-45, 47, 56-58, 60, 69-71, 73, 82, and 83 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 and 7 of copending Application No. 10/400140. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subgenus of compounds and composition claimed in the instant application are also embraced in the claims of the copending application 10/400140. Note the three substituents in the triazine compounds of copending application overlap with Zx, R<sup>7a</sup> and R<sup>2a</sup> groups of instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is James O. Wilson, whose telephone number is 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

  
Venkataraman Balasubramanian

4/10/2006

Continuation of Disposition of Claims: Claims withdrawn from consideration are 4,6-13,20,22-29,33,35-42,46,48-55,59,61-68,72 and 74-81.